

REQUEST FOR MSP APPROVAL (1-STEP PROCEDURE)

TYPE OF TRUST FUND:GEF Trust Fund

PART I: PROJECT IDENTIFICATION

Project Title:	Sustainable Urban Mobility Program for San Jose, Costa Rica			
Country(ies):	Costa Rica	GEF Project ID: ¹	5838	
GEF Agency(ies):	IADB (select) (select)	GEF Agency Project ID:	CR-T1119	
Other Executing	MINAE Costa Rica	Submission Date:	2014-06-12	
Partner(s):				
GEF Focal Area (s):	Climate Change	Project Duration	30	
		(Months)		
Name of parent program		Project Agency Fee (\$):	\$153,922	
(if applicable):				

A. FOCAL AREA STRATEGY FRAMEWORK²:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Co- financing (\$)
CCM-4	Outcome 4.1:	Output 4.1: Cities	GEFTF	1,297,886	6,611,269
(select)	Sustainable transport and	adopting low-carbon			
	urban policy and	program			
	regulatory framework				
CCM-4	Outcome 4.3:	Output 4.3: Reduction	GEFTF	484,371	1,608,731
(select)	Mitigation of GHG	of 1 million tonnes of CO ₂			
	emissions	for the period 2014- 2019			
(select)			(select)		
(select)					
(select)			(select)		
(select)					
(select)			(select)		
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(select)					
(select)			(select)		
(select)					
(select)			(select)		
(select)					
	-	Total Project Cost		1,782,257	8,220,000

B. PROJECT FRAMEWORK

Project Objectives: The general objective of the project is to support the development of activities that have a transformative impact in helping Costa Rica move towards a low-carbon development path, through a concerted effort to improve land use management, transport planning, and the implementation of an integrated public transport network in the San Jose Metropolitan area.

Project Component	G rant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Cofinanc ing (\$)
1. Integration of public	TA	1.1 Increased KM of	1. 1 Five	GEFTF	239,191	3,855,181
transport improvements with		integrated public	Workshops with			
non-motorized and private		transport coverage and	public sector and			
motorized modes		increased km in	private transport			

¹ Project ID number will be assigned by GEFSEC.

² Refer to the reference attached on the <u>Focal Area Results Framework and LDCF/SCCF Framework</u> when filling up the table in item A. 1

		coverage of NMT. 1.2. reduced tons of CO2e from more efficient operation of public transport vehicles in 429,000 tons of CO2e in 5 years	operators to provide incentivesto implement public transport improvements. 1.2. Development of Integration guidelines for public transport 1.3 Multi- modal integration pilot project between public transport and NMT (walking and cycling).			
2. Development of a Travel Demand Management (TDM) policy and instruments for San Jose	TA	2.1. Reduction of vehicle kilometers traveled (VKT) in private automobiles and greater use of public transport 2.2. Reduction of 14,000 tons of CO2e in a 5 year period due to reduction of private vehicle VKT	2.1. Travel Demand Management Policy guidelines and strategy document for its implementation 2.2. Workshops with private sector to implement TDM policy 2.3. Pilot project of Parking pricing/manageme nt TDM in San Jose City center.	GEFTF	193,993	1,644,000

2 Development of land	Τ 4	2.1 Deduction of	2.1 Landura	CEETE	202.020	821 000
3. Development of land use and transportation policies based on relevant studies 4. Technology	TA	3.1. Reduction of average trip length and mode switch of at least 7% from private vechicle to public transport and NMT for trips in San Jose due to integration of land-uses and transport in accordance with the existent POT document for San Jose (Plan de Ordenamiento Territorial) 3.2. 115,000 tonnes of CO2e emissions reduced through a shift towards more sustainable transport modes 3.3 Detailed tracking of current and future GHG emissions from the San Jose Transport Sector within the Greater Metro Are 4.1 reduction of	3.1. Land use study for possible uses along the public transport system corridors in San Jose and Strategy document for implementation of land use policy. 3.2. Compilation of data on urban development indicators 3.3. Improved regulations and land-use planning related to transport 4.1 Diagnosis	GEFTF	392,029 403,069	821,999 493,200
4. Technology improvement of vehicle fleet		4.1 reduction of 158,000 tons of CO2e in a 5 year period due to cuasirentas technology substitution	4.1 Diagnosis of the vehicle fleet in San Jose, and consolidation of data on vehicle fleet for the city 4.2 Feasibility of implementation of clean fuel technologies and development of pilot project 4.3. Guidelines towards a vehicle monitoring systems 4.4 Pilot project on vehicle technology improvement of 100 cuasirenta vehicles 4.5 considering implementation of financial incentives to promote newer technologies. 4.6 Promote economic incentives to promote use of cleaner technoogies in the transport sector.	GEFTF	403,069	493,200

5. Development of GHG baseline calculations & Monitoring Reporting and Verification system	TA	5.1 Detailed tracking of baseline and future GHG emissions from the San Jose Transport Sector within the Greater Metro Area	5.1. Revision of data on GHG emissions from transport sector 5.2. Development of	GEFTF	391,951	657,600
		5.2. Monitoring Reporting and Verification (MRV) system in place.	baseline studies for current GHG emissions and potential savings from transport 5.3. Monitoring, reporting and verification system 5.4. Midterm and final project			
	(sele		evaluations	(select)		
	(sele			(select)		
	(sele			(select)		
	(sele			(select)		
	(sele			(select)		
Subtotal					1,620,233	7,471,980
		Project Management Cost ³		GEFTF	162,024	748,020
		Total Project Cost			1,782,257	8,220,000

C. CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
GEF Agency	Inter-American Development	Cash	800,000
	Bank		
National Government	MOPT (Ministry of Public	Investment	7,000,000
	Works and Transport)		
National Government	MINAE (Ministry of	In-kind	170,000
	Environment) PMR		
Bilateral Aid Agency (ies)	GIZ	Cash	250,000
(select)		(select)	
Total Cofinancing			8,220,000

D. GEF/LDCF/SCCF/NPIF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
IADB	GEFTF	Climate Change	Costa Rica	1,782,257	153,922	1,936,179
(select)	(select)	(select)				0
(select)	(select)	(select)				0

³ PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Gra	Total Grant Resources			1,782,257	153,922	1,936,179

In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table

² Please indicate fees related to this project.

E. **CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:**

Component	Grant Amount (\$)	Cofinancing (\$)	Project Total (\$)	
International Consultants	300,050	2,425,930	2,725,980	
National/Local Consultants	363,250	1,454,070	1,817,320	

DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? No F.

(If non-grant instruments are used, provide an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

PART II: PROJECT JUSTIFICATION

A. **PROJECT OVERVIEW**

1) Global environmental problems, root causes and barriers to be addressed.

While transport is crucial to a country's growth and development, it is also closely linked to anthropogenic Greenhouse gas (GHG) emissions that cause climate change. On a global level, transport produces about 23% of the world's CO_2 emissions. In Latin America, the transport sector is the largest and fastest-growing contributor of CO_2 emissions from energy consumption, producing 35% of these emissions. Road transport accounts for about 90% of transport CO_2 emissions in the region, half produced by passenger traffic and the other half by freight transport. In the face of the high urbanization rate in the region, and the rapid increase in private vehicle ownership, a rapid increase of GHG emissions caused by the transport sector is expected.

In various policy documents, Costa Rica has established transport as a strategic area to improve the efficiency and effectiveness of its systems and have a great potential to mitigate climate change substantially, in line with their goal to be carbon neutral by the year 2021.

Costa Rica's National Climate Change Strategy Action Plan (2013) has established a full set of measures that should be implemented in order to improve efficiency of all sectors of the economy, and within those sectors, transport is placed as an immediate priority. The National Government has found that transport is responsible for 27% of total GHG emissions in the country (Adamson for MINAE, 2008).

As part of their Transport action plan, the public transport zoning project (also known as *sectorizacion del transporte público*) represents an important measure that will contribute to that goal of the Action Plan.

Rapid population growth and vehicle ownership rates driven by increasing incomes will lead to increased vehicle activity and higher GHG emissions. To combat increases in GHG emissions from the transport sector, national and sub-national governments are adopting a more sustainable low-carbon transportation path through an integrated "**Avoid-Shift-Improve**" (A-S-I) approach. This integrated and comprehensive approach seeks to **avoid** or reduce vehicle kilometers traveled that do not serve a productive goal, **shift** passenger and freight cargo movements to efficient and less carbon-intensive modes, and **improve** vehicle and fuel technologies, reducing GHG emissions from urban transportation (passenger and freight).

San Jose's current transport conditions: The metropolitan area of San Jose, Costa Rica (Gran Área Metropolitana de San Jose, or GAM, from its Spanish acronyms), includes the four most populated urban centers of the country: San Jose, Heredia, Cartago, and Alajuela, as well as several smaller urban centers, with a total population of 2.5 million inhabitants (2007). The GAM will be the focus area of this project, which will be referred to as GAM or "the city" or "San Jose" in this document.

Mode	Percentage of trips
Regular buses	40.8%
Non-motorized transport	25.3%
Private vehicles	23.5%
Special buses, taxis, informal services, train and motorcycles	10.0%

The main modes of passenger transportation in the area are:

Table 1 - Source: IDB reports - Fabio Gordillo - Development of Sustainable Urban Mobility Plan for San Jose.

As in most cities in the developing world, traffic congestion problems have been exacerbated due

to a rapid increase in the use of private cars. In 1998, there were slightly more than 250,000 private cars in the country. By 2010, this number had climbed to more than 1 million, which represents an increase of about 300% in just over one decade. This scenario illustrates various issues:

- Public transport users are mostly captive riders, meaning that they are unable to use another mode of transport and the use of public transport is virtually their only choice.
- Use of non-motorized transport is not as high as other cities in the region, especially when considering that the average distance traveled in San Jose does not exceed 7 km. For instance, 4% of trips in Bogotá (Colombia) are carried out by bicycle, while in San Jose only 2% of trips are completed using that mode.
- The use of private motorized vehicles has increased with basically no restrictions related to road space use, parking demand, nor faced costs as a function of vehicle use. The lack of travel demand management (TDM) has generated a vicious cycle mainly driven by rising incomes which directly related to an increase in automobile ownership rates and their excessive use.

Barriers for the implementation of sustainable transport measures:

There are five main barriers faced by the development and implementation of a sustainable urban mobility plan in San Jose. These barriers prevent effective reductions in GHG emissions from the transport sector. Before implementing sustainable transport solutions, the city must address the following issues:

- 1. Lack of urban mobility plans featuring suitable transport policies and projects that can integrate existent public transport system improvements with other modes of transport.
- 2. Lack of coherent and enforceable travel demand management TDM policies to complement public transport improvements. This element is missing mainly due to lack of technical knowledge and capacity to implement suitable measures within governmental bodies. San Jose has not been able to solve its pressing urban transport problems by implementing optimal parking pricing policies, vehicle ownership fees and pricing road use to modify the price elasticity of demand for private car use. TDM measures have proven to be the best complement to public transport improvement. They help the transport user chose a mode of based on the price signals that the system provides (see Broaddus et al, 2009; Litman, 2011; Pardo, 2012; IDB, 2013).
- 3. Lack of land-use planning integrated with public transport plans and policies in San Jose. Without this integrated plan, the potential for long-term benefits in GHG emissions reductions from the transport sector are significantly reduced and great opportunities are missed. Land use policies in San Jose have generally featured relatively low-density and do not yet follow a transit-oriented development pattern.
- 4. Lack of proper standards, regulations and incentives to produce and import cleaner fuels and vehicles used in San Jose. The lack of vehicle regulatory frameworks prevents the country from improving fuel quality and the import of cleaner vehicles, thus limiting the potential for GHG emission reductions. For San Jose, the implementation of cleaner technologies in the national vehicle fleet would be of great benefit, especially for specific types of vehicles such as cuasirentas – a low-capacity public transport system based on light-duty vehicles.
- 5. Lack of studies and estimations of basic transport-related indicators that would support proper frameworks for the estimations of GHG emissions baselines and potential reductions. Data compilation of climate change-related initiatives has become a crucial

step to developing comprehensive emission reduction policies that can be properly measured, reported and verified (WeMaere, 2009).

2) The baseline scenario and associated baseline projects

The baseline scenario is limited to the public transport zoning (sectorización) intervention for the GAM of San Jose, and other public transport projects that are planned for the city in the next 5 years. It is important to mention that there are plans to implement a light rail mass transit system; however, this project will not be completed within the next five years. The project boundary for this proposal is the GAM. This initiative is also mentioned explicitly in Costa Rica's Climate Change Action Plan (2013) as one of the key measures to reduce emissions, and has also been mentioned as one of the main improvements to be implemented as part of the NEEDS⁴ assessment for Costa Rica (MINAE, INCAE, Fundecor, 2010). This GEF proposal complements the public transport zoning project, financing incremental costs associated with scaling up the transport zoning project to achieve global environmental benefits.

In Costa Rica, the Ministry of Public Works and Transport (MOPT) is the main public entity in charge of transport policy planning and regulation. As part of its responsibilities, the MOPT has started the implementation of the public transport zoning project which involves the improvement of public transport by physically integrating public transport services (including operation, management and fare collection components) in nine sectors of the city. This process provides incentives for the operators to consolidate operations based on the nine sectors of the city. In terms of environmental benefits, the reorganization of public transport lines, and improvements in the overall public transport service operations will decrease the number of kilometers travelled on public transport vehicles. These actions will reduce GHG emissions by a) reducing the number of vehicle kilometers traveled; b) increase the bus load factors (improving efficiency of the system); and c) making the public transport system more attractive and increasing the potential mode shift from private motorized modes to public transport.

The zoning process has gained traction within the government, and interestingly, public transport operators have organized themselves and have discussed with the MOPT their role in improving their services. The implementation of the zoning project will begin in May 2014, which also marks the time when public transport operator's current contracts will expire and will be renegotiated. This is an important opportunity to improve service (by creating more performance-based contracts that are related not only to route permissions but to operations and quality of service).

There is also an interest to improve the mode of "cuasirentas", described in the discussion of barrier 4 above. The vehicles used for "cuasirenta" are particularly old and polluting vehicles. The government is aiming to improve these vehicle technologies through the replacement of 1% of the "cuasirenta" vehicles with electric vehicles. In order to consider the implementation of a framework to improve vehicle technology for the "cuasirtentas" it is important that a vehicle registration system is in place, something that is not in place today.

All urban transport improvement measures have been promoted by the National government given these measures' clear climate change mitigation potential. Given its climate change mitigation, MINAE has provided substantial support in the development of this proposal In order to reach a truly carbon-neutral scenario in the transport sector, authorities must

⁴ National Economic, Environment and Development Study for Climate Change

complement the public transport zoning project by developing multimodal integration projects that enhance public transport services, reduce the demand of travel in private motorized transport, and develop a long-term solution for land use and transport integration (with guidelines related to transit oriented development).

3) The proposed alternative scenario, with a brief description of expected outcomes and components of the project

The general objective of the project is to support the development of activities that have a transformative impact in helping Costa Rica move towards a low-carbon development path, through a concerted effort to improve land use management, transport planning, and the implementation of an integrated public transport network in the San Jose Metropolitan area. The specific objectives of this project are to produce studies and other knowledge creation materials for the support of: (1) public transport integration with non-motorized transport and private motorized modes; (2) develop comprehensive travel demand management policies for San Jose Metropolitan Area; (3) development of land-use and transport policies; and (4) improvement in technology for a portion of the vehicle fleet in Costa Rica Metropolitan Area. This project is aligned with the CGI-9 as its activities will focus on reducing environmental degradation, responding to through activities that can reduce the effects on climate change and promote sustainable urban development through sustainable urban transport policies, programs and projects.

This GEF project has five main components that address the barriers identified earlier in this proposal and complement the zoning project (baseline project described above). Schematically, the project can be seen as pictured below, where the zoning project is complemented by avoid, shift and improve components while surrounded by an MRV framework.

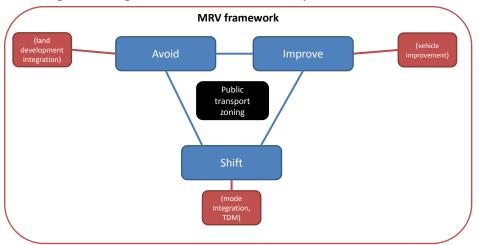


Figure 1. General graphic outline of the baseline and GEF project proposed here.

The avoid-shift-improve paradigm is utilized to generate a complete program of sustainable, lowcarbon mobility that complements and enhances the mitigation potential of the existent zoning project by shifting private motorized trips to public transport and other less carbon-intensive modes, the following steps should be taken:

- 1. Develop a strategy to integrate public transport with non-motorized transport and private transport.
- 2. Create a strategy for travel demand management to complement the improvements in public

transport and its multimodal integration.

- 3. Develop long-term plans to integrate land use and public transport in the city
- 4. Create a project to improve of vehicle technologies and economic incentive programs to promote purchases of newer, less carbon-intensive vehicles.
- 5. Create GHG emissions inventories for the on-road transport sector and studies on the potential GHG emissions reduction of these components.

The components of this GEF are aligned with the avoid-shift-improve paradigm and its components are described below.

Component 1: Integration of public transport with non-motorized and private motorized modes

The objective of Component 1 is to complement the baseline project (public transport zoning project for San Jose). The objective constitutes the creation of manuals and guidelines for the integration of facilities and operations used by cyclists, pedestrians and car users, permitting these users to arrive at multi-modal stations and continue their trips in public transport. This implies creating leverage for development of suitable infrastructure (i.e. "integration hubs") at specific public transport stations and, in some cases, park-and-ride facilities for automobile users. This task will support the implementation of a pilot project to demonstrate the effectiveness of public transport integration. The pilot project will be composed of a bus rapid corridor implemented by the ministry of transport and public works. The pilot project will have an integration component for the support of NMT and public transport integration supported in by this grant. The specific output will be the design of pedestrian facilities and bike parking/facilities to improve access of bikers and pedestrians to the mass transit corridor. Component 1 will also have the objective of generating co-benefits in terms of cleaner air (through increase in the share of trips shifted to more sustainable modes and reduced VKT), improved road safety (reduction of VKT has a direct positive correlation with reduced vehicle accidents)), reduction of the opportunity cost related to time spent traveling (via reduced congestion and reduction in travel times and time spent stuck in traffic congestion). Once this component is completed, it is expected to be replicated in other zones of the GAM and other cities in the country. The completion of this component also expects to improve public transport coverage, reduce average trip lengths, and increase in bicycle use, resulting average savings of 175,420 tonnes of CO₂e during the 10 year lifetime of the project for the construction of bikeways that will incentivize the use of bicycles. From the improvement of public transport services, it is expected that the integration along with the BRE corridor will save 229,600 tons of CO₂e during the 10 year period featuring a replication effect of 2 (another 2 corridors will be implemented) with additional indirect impacts of 459,200 tons reduced.

Component 2: Development of a travel demand management policy instruments for San Jose

The objective of component 2 is to complement the overall public transport zoning project with the development of a travel demand management (TDM) policy that aims to reduce the demand for motorized private vehicle trips, which would increase the demand for public transport and other less energy-intensive modes. TDM measures are generally called "push" strategies and

should always complement pull strategies. Though there will be greater study of these issues, one potential activity will be to have an improved parking policy in San Jose, that rationalizes the supply and that could be priced to provide at least 15% of availability rate per block, based on market mechanisms.

Parking regulation would also enable the development of an improved financial framework for urban transport in San Jose, since revenues from TDM can be used to cross-subsidize improvements in public transport service and other sustainable transport measures discussed here. It must be reiterated that private sector parking associations have expressed their interest in this projects and the measures that are being proposed, which is a positive condition to implement the pilot project and for its future replication in the city and beyond. This component will also generate considerable co-benefits in the sense that it will reduce private vehicle VKT, and thus will improve road safety, reduce congestion and improve air quality.

Travel demand management instruments range from fuel pricing policies to parking management and pricing. These also include different pricing instruments such as road use charging, pay-asyou-drive schemes and vehicle quota systems. These measures have proven to increase the demand for public transport as they compose a more comprehensive set of price and behavioral signals to users that public transport is less costly and more efficient (in terms of use of space and overall expense) compared to using an automobile.

San Jose has a consolidated group of private parking operators that have pushed improvements for parking policies in the city. They have developed a "parking law" that has guided most of the current operational standards of the sector, and are most interested in pursuing improved parking policies as a TDM strategy for the city. These types of measures are also mentioned explicitly in Costa Rica's Action Plan for Climate Change. The NEEDS assessment for Costa Rica (MINAE, INCAE, Fundecor, 2010) has also contemplated similar measures for the improvement of the conditions (minor ones, such as plate restrictions), with an average estimated mitigation potential of 151,281 tCO2 per year. The measures proposed here are quite ambitious and would have a greater mitigation potential, thus the NEEDS calculation will not be used in the analysis presented in section A5. An analysis was carried out using the GEF methodology for transport projects (TEEMP) and average potential reduction benefits were calculated at 13,895 tCO₂ or about 138,950 tons of CO₂eq for the 10 year lifetime of this project.

This component will include four measures, namely:

- a. Development of Travel Demand Management Policy guidelines for San Jose: these will analyze the existent policies conducive to the reduction of vehicle kilometers traveled in San Jose, and potential measures that could be taken to improve the situation, manage demand properly and create revenue streams from transport and consolidate them into written guidelines.
- b. Workshops with the private sector to implement win-win solution on travel demand management for San Jose: This will imply meetings with relevant stakeholders who have a direct relationship with the problem at hand (e.g. the Asociación de Estacionamientos y Afines), discuss the benefits of implementing TDM measures in the city, both for the city itself and its transport problems and for private sector and other relevant sectors. This will enhance the buy-in of these concepts within the private sector.
- c. Compilation of data on travel, demand and transport indicators: The component must also include data gathering relevant to the measurement of progress of the component.

- d. Development of a policy document for the implementation of travel demand management measures: This will be a document which will provide a detailed description to implement the travel demand management measures for San Jose and will provide detailed guidelines on how the process should move forward.
- e. Pilot project of TDM in San Jose City Center: This activity will imply the identification of an adequate TDM policy that can be implemented in the city center of San Jose and can demonstrate the effectiveness of such measures (e.g. regulation of pricing and supply of parking in the city center). The IDB will follow up analyzing the potential to scale up parking pricing in polygons adjacent to the pilot project. This will ensure increased coverage and will ensure enforcement in a larger area.

Component 3: Development of land use and transportation policies based on relevant studies

This component will be based on the consensus arrived at in Components 1 and 2; the sustainable transport solution that the Government of Costa Rica decides on will be further developed by this component. This means that based on the type of TDM policy instruments and the integration project that the government decides to implement, this component will develop studies on potential changes in land use/land use policy to further support the mitigation potential. The objective of Component 3 is twofold: To review the existing studies and plans that have been developed over the last years, and to develop new studies to support the implementation of transport and land use plans where necessary. It must be reiterated that private sector land developers are seeking opportunities of brownfield developments in the GAM, and have expressed their interest in implementing a project where there is a strong component of land use and transport integration. The land use studies prepared under this component will consider the potential use of brownfield developments in the transport sector. The implementation of this component will have considerable co-benefits since the reduction of VKT and mode shifts to more sustainable transport modes will improve air quality, reduce congestion and improve road safety.

The integration of urban land and transportation policies has been solidified in the approach of Transit-Oriented Development, where a transportation system is developed in clear relation to the guidelines of a land development plan. This has shown to be a very potent measure in terms of trip length and frequency reduction, and has shown potential in San Jose and interest from private land developers in preliminary meetings. In Costa Rica, measures related to reduction of travel by means of urban measures have been mentioned as a main set of measures to be implemented as part of the NEEDS assessment for Costa Rica (MINAE, INCAE, Fundecor, 2010), and they have estimated an annual average mitigation potential for the entire country of 109,129 tCO₂eq country-wide.

The component will finance the following:

a. A study of different possible land uses along the future BRE corridors. The goal of this study is to create policies to take better advantage of the land along the bus corridors, identify economic mechanisms that promote densification and diversification of land uses, provide alternatives to promote the development of decentralized service centers along the corridors, reducing the need for trips to the center of San Jose. The scope of the GEF project is to lay the foundation for a Sustainable Urban Mobility Plan. This study will be supported by a workshop pertinent land development stakeholders (e.g. the Cámara de Construcción de Costa Rica) in the private and public sectors. The workshop

aims for the development of a long term win-win solution for suitable integration of land use and transport planning. It emphasizes the need to discuss, with the private and public sectors, their views on how such strategy should be implemented. Since most capital expenditures and large development plans will be moved forward by these stakeholders, their buy-in is essential to this development. It must be noted that preliminary discussions with the private sector have gained ground in this respect.

- b. Strategy document for implementation of land use policies in the medium and long term: This document will provide a strategy on the vision for San Jose in terms of transport and land use integration, with great emphasis on the role of public transport (and TOD) as a core strategy to achieve sustainable land development in the city. This will be complemented by a strategy document with guidelines to integrate the proposed land use policies with public transport, non-motorized transport and travel demand management: This document will include detailed guidelines on how to achieve the full integration of land use, public transport operation, non-motorized transport and travel demand management in San Jose.
- c. Compilation of data on urban development indicators: the component must also include data gathering for urban development, land use and other indicators relevant to the measurement of progress of the component.

Once it has been implemented, this component seeks to improve the regulations and plans for urban transport and land integration. It is not possible to expect a short-term materialization of benefits for this component as it is a process that takes various years to be consolidated into plans, policies and features large-scale implementation frameworks. Thus, the component seeks to set the ground for the implementation of high-impact land development that is properly integrated with transportation systems while taking into account the public transport improvements and plans of the public transport zoning project.

Component 4: Improvement of vehicle fleet

In order to adopt the A-S-I paradigm and build a roadmap towards a more sustainable transport sector, it is important to create the necessary frameworks that will enable the development and adoption of cleaner vehicle technologies in San Jose. Of particular relevance, these frameworks are expected to provide the incentives to improve or shift the present technologies used in the old fleet from cuasirentas.

This also implies understanding the vehicle fleet characteristics and the potential improvements that will increase the proportion of clean vehicles compared to those of lower standards. The implementation of this component will also generate reductions in emissions of various pollutants, as well as improved safety conditions of vehicles and thus improved traffic safety. This will tackle the "improve" side of the equation of urban transport improvements under the A-S-I framework, and will help to establish a comprehensive approach for reducing emissions. When combined with the other measures of avoid (e.g. land use and transport integration) and shift (e.g. public transport integration to non-motorized and private transport), there is a powerful combined effect these of measures (see Dalkmann & Branningan, 2007).

In this respect, MINAE has commissioned comprehensive studies on the positive impacts of the improvement of the vehicle fleet of cuasirentas, and has found that various technologies are available and would have an adequate cost-benefit ratio if they were to be implemented (CINPE, 2012, see graphs below). These types of measures are also mentioned explicitly in Costa Rica's

Action Plan for Climate Change. Vehicle improvements have also been mentioned as one of the main measures to be implemented as part of the NEEDS assessment for Costa Rica (MINAE, INCAE, Fundecor, 2010), where the implementation of electric vehicles (10% fleet replacement) had an estimated mitigation potential of 454,092 tCO₂ per year for the entire country. Based on these calculations, a more detailed calculation was done specifically for the GAM and found an estimated emissions reduction of 2,860,783 tCO₂eq.

Below are three graphs from an analysis of vehicle fleet emissions and potential improvements as developed by CINPE in 2012. They present a projection of emissions depending on region and fuel (Fig 3), CO_2 emissions of different technologies by regions (fig 4).

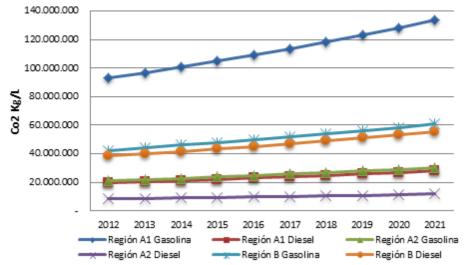


Figure 2. Estimation of CO2 emissions of existing fleets depending on Costa Rica's region – region Alis San Jose Metropolitan region, CINPE, 2012).

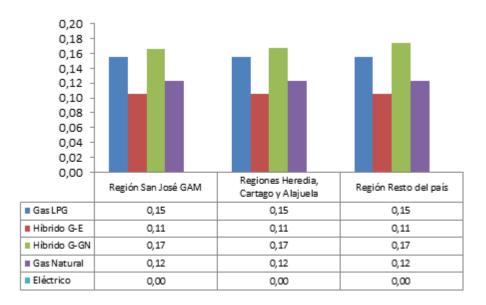


Figure 3. CO_2 emissions (pax/km) for different vehicle technologies in regions of Costa Rica, CINPE, 2012)⁵

In order to arrive in a scenario of an improved vehicle fleet, the following steps must be taken:

- a. Diagnosis of the vehicle fleet in San Jose: A more comprehensive knowledge of the vehicle fleet in San Jose is important to understand how it can be improved, where the larger problems lie and what issues are a clear deterrent of improved vehicle fleets in the city and country. For instance, the fact that importing used vehicles is allowed is a significant factor of reduced vehicle efficiencies and standards that must be addressed in this diagnosis.
- b. Data consolidation on vehicle fleets for the city and related indicators: The component must update and refine the existent data for vehicle fleets, and specify it for the GAM and San José.
- c. Improvement of conditions of the "cuasirentas" vehicle fleet technologies: The advantage of improving these vehicles (specific measures to be defined as part of the project, but mainly means the implementation of electric vehicles or retrofitting some of the vehicles from gasoline to natural gas) generates important benefits since these vehicles are significant polluters that could be retrofitted to use less carbon-intensive fuels and vehicle technologies.. It will also generate a considerable change in the vehicle industry in terms of availability of cleaner vehicles, which has considerable effect on the overall quality of the fleet on the road.
- d. Feasibility of implementation of clean fuel technologies and development of pilot project: identifying a specific project that can demonstrate the potential of an improved vehicle fleet. Cleaner fuel technologies can be implemented in San Jose, but the knowledge of the specificities of such implementation must be clearly outlined before embarking upon such an endeavor. This will imply a deeper understanding of the technologies, stakeholders and general conditions for the implementation of cleaner fuels and technologies in the city and country. Some guidelines have been developed in the past, though their level of detail could be improved and updated in order to be in line with climate-change mitigation objectives and state-of-the-art knowledge.
- e. Guidelines towards a vehicle monitoring system: This will imply the analysis of current fuel and vehicle policies and the development of specific guidelines towards the improvement of regulations that can benefit the use of cleaner vehicles and fuels, while creating a better regulatory vehicle mechanism through an Inspection and maintenance scheme.
- f. Consider the development of guidelines for the implementation of financial incentives that promote cleaner technologies. This will include the economic/financial tools the Government of Costa Rica could use to promote newer vehicle and fuel technologies.

Component 5: Baseline studies and estimated GHG emissions reductions

To be able to measure reductions in GHG emissions from various transport projects, it is important to have high quality GHG emissions inventory for the transport sector in the San Jose Metropolitan Area. Costa Rica has already developed basic emission standards for different fuels (reported by their Instituto Meteorológico Nacional and their Climate Change Program). This

⁵ Note that electric vehicle CO2 emissions depend on the generation of the electricity used to power such vehicles.

component will follow the climate change framework that is currently in development under the auspices of the Ministry of Environment and Energy. The implementation of this component will provide useful information as a basis for the cobenefits calculation.

The component will provide:

- a. Revision of existing data related to the sources of GHG emissions from the transport sector; definition of additional data that needs to be collected.
- b. Definition of methodology for estimating GHG emissions. Most likely the methodology to be used will be the STAP methodology developed by the GEF.
- c. Development of baseline studies on current GHG emissions from transport in the San Jose Metropolitan Area.
- d. Creation of Model estimating potential GHG emissions reductions to be achieved through sustainable urban mobility, with short, medium, and long term scenarios. The studies will include different scenarios, including BRT and NMT projects.
- e. Preliminary proposal for a monitoring (measurement), reporting and verification (MRV) system in order to arrive at the first stages of a NAMA proposal: The development of a specific process for MRV will imply considerable work but is one of the two major components (the other being the actual policy).

4) Incremental cost reasoning and expected contributions from the baseline , the GEFTF, LDCF/SCCF and co-financing

Incremental cost reasoning

The transport zoning project ("Sectorización") as a standalone plan can have a significant reduction on GHG emissions and will effectively reduce the impact on climate change. However, it is now clear from many experiences throughout the world that public transport improvements by themselves do not provide benefits in the way that was expected, and they need complementary measures to have a durable impact that will not only strengthen public transport but will also provide greater benefits to society as a whole. For instance, a high capacity bus corridor may not realize its full mode shifting potential if no incentives and price signals are implemented for car drivers to make the switch. Thus, the GEF financial contribution will support the reduction of over 2 million tons of CO_2 emissions in a 10 year period at US\$5 per ton reduced, turning this project into global environmental benefits.

The incremental costs for this project to yield global environmental benefits come directly from implementing the components described above (integration with NMT and private transport, integration with TDM, integration with land use, improvement of vehicle standards and regulations, and development of baseline studies). These improvements will bring additional positive environmental and socio-economic impacts to the public transport zoning project.

Expected contributions from the baseline , the GEFTF, LDCF/SCCF and co-financing

The IDB has already financed studies and study missions to appraise the current situation of sustainable transport in San Jose, which have identified some of the main barriers to implementation and fund opportunities to develop this proposal. These studies were financed with IDB's technical cooperation funds.

IDB is developing a series of studies to strengthen the implementation of the sectorization project, that amount to US\$800,000 and will be taken as a counterpart contribution to this

project. This contribution will be applied to create studies that will improve the knowledge regarding the baseline scenario (data collection on bus routes, mode shares and origin-destination matrices) and will also aid in understanding what investments are needed in order to integrate the public transport services in the GAM.

In addition, the MOPT and MINAE will provide in-kind co-financing. MOPT is investing US\$7,000,000 in the implementation of a Special Bus System (BRE)⁶. It must be noted that the government of Costa Rica is specifically focusing on investing their counterpart contributions in concrete actions rather than in studies. Such contribution will specifically fund the implementation of the BRE pilot system and also the implementation of the travel demand management pilot project.

International agencies are also providing counterpart contributions to this project, such as World Bank PMR (US\$170,000), GIZ (US\$250,000). Support letters from these organizations are provided as annexes to this project document. The co-financing from these organizations will also contribute in studies and implementation of the TDM pilots and also the vehicle technology improvement pilot project that is expected to reduce over 2 million tons of CO_2e in a 10 year period with a cost-effectiveness of US\$5 per ton reduced.

5) global environmental benefits

This project will be focused on the city of San Jose but will have replication potential in various other cities in Central America and Latin America and the Caribbean. Its impacts, in terms of GHG emissions reduction will be properly measured (see component 5) in order to have a clear understanding of the improvement of the sector and its impact in a global level. The expected reductions in GHG emissions of this project

6) innovativeness, sustainability and potential for scaling up

The project is innovative because of the mobility instruments used are quite new for the Latin American region. It comprises a set of measures that have been applied extensively in many places in the world, but few times in Latin America and never in Central America. The studies carried out by this project can be used to replicate and scale up this kind of projects in the region. If the pilot projects supported by this project are replicated effectively, can serve as the base for mobility policy and project implementation in other cities in the region, and the Bank has the potential for serving as a platform that countries in Latin America can use for knowledge sharing. The components that have been described above have not been directly proposed by government to stakeholders but have been a result of many dialogues between government agencies at the national and local level and with civil society and private sector organizations that have shown explicit interest in taking active part in the development of the project. This alone provides a firm stepping stone for the sustainability of the project and its true implementation potential and long-term impact.

The project has been developed in such a way that it will start by implementing pilot projects with the aim to expand them towards other locations in the city (i.e. an NMT-integration location, a TDM pilot measure in the city center, etc). This will enable an initial review of the potential of each measure, the obstacles that were found and will provide the opportunity to improve the project in subsequent stages where the pilot exercises are broadened.

⁶ This is a public transport improvement corridor similar to a BRT system

A.2. Stakeholders. Identify key stakeholders (including civil society organizations, indigenous people, gender groups, and others as relevant) and describe how they will be engaged in project and/or its preparation:

Other than MINAE (main implementer) and MOPT (sector ministry) whose roles and coordination are described in section A7, the following are other key stakeholders that have been contacted in the development of this proposal and which are relevant to this process:

The Finance Ministry has a relevant role in terms of the regulations that will be proposed and how they impact (positively) the government's revenue from transport-related products and services.

INVU (Institute for Housing and Urbanism) will be relevant for development of the land use strategy.

Municipality of San Jose: Their role in cooperating for the development of integration hubs and complementing them with their plans for bikeway and pedestrian facility development is very important as well.

Civil Society organizations: there some civil society organizations, mostly related to the development of people-friendly spaces such as bikeways and public spaces. The Chepecletas organization provided feedback in the development of this proposal and will be included in the development of this project. Other civil society organizations will be sought to complement Chepecleta's involvement.

Private sector organizations: support from private sector is a positive enabler for these components, as they are not just a public-sector endeavor but will also enjoy private sector support. Three specific private sector stakeholders were identified: public transport operators, parking association, private land developers' chamber.

International agencies and organizations: Other international agencies such as GIZ, World Bank (PMR) have been developing related initiatives which would be useful here as well both in terms of co-financing and in terms of complementarity of these efforts.

Academic organizations: Some research units such as Pro-DUS and the Universidad Nacional are well respected and reliable stakeholders which can provide sound analyses for all components of this program.

A.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF).:

Sustainable transport has been implemented in various cities around the world. Having integrated public transport, improving conditions for non-motorized transport and generating travel demand management strategies have shown that there is a positive benefit in the short and long-term for a city. Some of these benefits include:

- Reduction in motorized private vehicle kilometers traveled.
- Reduction of GHG emissions (which is the main goal of this program).
- Increased mobility and access to job markets, education and healthcare (Lower income groups tend to use public and non-motorized transport for the majority of their trips,

while private motorized trips are more common among middle and upper income groups (Vasconcellos 2006).

- Improvement of road safety (In New York City, streets that received redesigns including bikeways in 2009 registered a 50 % drop in injuries and a close-to-100% drop in fatalities)
- Reduction of travel times and improvement of travel conditions in general
- Improved health of the population (Experts recommend 30 minutes of moderate exercise per day which is easily achieved by walking or cycling as a mode of transport). (Center for Research in Environmental Epidemiology, 2011; Gotschi 2010).
- Increase in city revenue and for public transport operators. (Congestion pricing in London generates US\$ 158 million for improvements to public and non-motorized transport)
- In general, improvement of overall quality of life in citizens.

In Latin America, data shows that car ownership and bicycle ownership are unequally distributed between men and women, with men owning the majority of both modes of transportation. (Deere, Carmen Diana, Gina E. Alvarado and Jennifer Twyman, 2009. "Poverty, Headship and Gender Inequality in Asset Ownership in Latin America.".) This means that well-integrated public transportation systems is even more important for women than for men, as it allows them greater access to education, employment and other economic opportunities in cities. In addition, women especially benefit from an integrated, well-designed, universally accessible public transport system where they can enter with small children and strollers, for example.

In the future climate change scenarios that the country has published in 2012, Costa Rica has identified considerable risks in terms of its future precipitation, temperature and they have found that they depend on the policies that are implemented. Climate change has contributed to natural disasters across the world in recent years. They disproportionally affect the poor, who are more vulnerable because of where they live (usually the less desirable and more dangerous areas, such as erosion-prone hillsides, areas that easily flood, etc.), because they lack access to information, and because they often lack the resources (transport, finances) to get out in time. Across the world, women are more likely to be poor and earn less than men on all levels and it has been proven that they are more affected by phenomena such as rising waters caused by climate change, than men. This means that positive impact from climate change mitigation, such as reduced emissions, in the long term has an important positive impact on women.

A.4 Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks:

Risk	Rating	Mitigation
Stakeholders	Medium	The project includes workshops with stakeholders and
feeling threatened by		communication activities that will reduce this risk in
the implementation of		two main ways: first, integrating the views of
project components		stakeholders into the planning process; second,
(e.g. vehicle		providing more in-depth explanations of the actual
importers upon		impacts of the measures to be taken (which are

Below is a table indicating the main risks identified in the development of this GEF, their level of importance ("rating") and proposed measures to mitigate them.

regulation changes, citizens not wanting to change transport modes		generally positive for all stakeholders in the long run). It has been shown in other cases that these activities reduce the level of opposition o to a project
Risk	Rating	Mitigation
Lack of transportation activity data, information on fleet composition and characteristics and emission factors	Low	This risk has been partly mitigated: the IDB already financed a study on the feasibility of a sustainable urban mobility program in Costa Rica, Called "Technical Assistance for the Conceptualization of an Urban Transport Program for San Jose." This study contains valuable data on transport in the San Jose Metropolitan Area. In addition, given the implementation of BRT has been considered several times before, other studies also exist. Transport data and fleet composition data are still readily unavailable.
No consultation of the sectorization project	Medium	IDB has put forward a technical assistance grant which is considered a counterpart to this program. These technical assistance funds aim to ensure that the work being developed by the National Government does have the expected outcomes. This approach and grant have been endorsed by the National Government of Costa Rica.
Poor coordination and lack of alignment among government agencies; political considerations taking place	Low	The GEF project's management unit will manage the relationships between agencies with the support of: a. Technical and management support of IDB representatives from Headquarters and representation office in Costa Rica b. Resources to operate, deploy studies/analysis, finance incremental costs of projects that reduce GHG emissions from transport. The risks of poor coordination is present, but considered to be low. The main risk regarding coordination is the resistance from public transport operators, and mitigating this resistance is one of the main goals of this project. The government agencies (city and state level) are well aware of the needs of sustainable urban transport solutions in San Jose. In addition, the government has expressed strong interest in the project and will take a leadership role.

A.5. Explain how cost-effectiveness is reflected in the project design:

Below is an estimation of the impact of the proposed project on future GHG emissions. It shows that the proposed project will generate direct emissions reductions from the selected low-carbon transportation policies and measures. Emissions reduction will occur during the life of the project and beyond.

The most conservative estimate of emissions reductions from the project comes from the models of the *GEF Manual for Calculating GHG benefits of GEF Transport Projects.* Two TEEMP (Transport Emissions Evaluation Models for Projects) models were used here: one for bikeways (essential to integration with public transport) and another for pricing (a component of TDM). Assumptions for bikeways were: 20 kms of segregated bikeways built and the "sketch model" was used (this model doesn't use base or target years but only provides estimations by year). Assumptions for pricing were the improvement of parking pricing policy by increasing prices for automobiles by 80% and 50% for motorcycles, and "Parking pricing model" was used with a base year of 2011 and a full deployment year of 2015. For the land development integration component, main assumptions were that a full TOD scheme would be operational by 2025, and benefits can be calculated until 2034. For vehicle improvements, a conversion of the fleet to electric vehicles was assumed to take place as of 2016. These scenarios generated the estimated reductions in table 1 below:

			Direct	Indirect
Component	Assumption	Avg/year	impacts	impacts
Bikeways	20 km	17,542	175,420	175,420
Parking Pricing		13,895	138,950	138,950
	46% of NEEDS		857,600	
Transport Integration	assmt.	85,760		857,600
BRT (BRE) Corridor	80,000 pax/day	22,960	229,600	229,600
Replicate 2 corrs (indirect)	160,000 pax/day	45,920	459,200	459,200
	1% fleet		158,933	
Electric Vehicles	substitution	31,787		158,933
Total reductions tCO ₂ eq		217,863	2,019,702	2,019,702

Table $1 - CO_2$ reductions from the implementation of sustainable transport scenarios

According to the "GEF Manual for Calculating GHG benefits of GEF Transport Projects, one of the components for this project has a great potential to yield indirect positive impacts by way of replication effects (i.e. the ability to replicate projects in inside the GAM or other cities outside of the region). As both local and national governments become more aware of the benefits of sustainable urban mobility projects and plans, and barriers to implementation are removed (laws and regulatory frameworks are adapted to sustainable mobility projects and guidelines for emissions reductions studies are easily available, etc) the replication effects will increase.

In terms of the indirect benefits of the project, The replication potential for this project was estimated only for the BRE⁷ corridor by assuming that its successful implementation will spark the investment in additional 2 corridors, each carrying 80,000 passengers per day, within five years from the implementation of the first corridor. It is important to mention that GEF usually calculates replication effects by 4.4; however, for the sake of being conservative here we have assumed a replication factor of 2. Based on the "*GEF Manual for Calculating GHG benefits of GEF Transport Projects*", direct impacts are accounted for during the lifetime of the project (10 years), and there are indirect impacts that go beyond the project life. For indirect impacts in the last column of Table 1 above, these were indirect impacts of the GEF project in a 20 year period (10 years after the program has been implemented) assuming there are investments in maintenance of transport infrastructure.

⁷ According to the GEF methodology, BRT yields CO_2 savings of about .41 tons per passenger in any given corridor. In order to differentiate between BRT and BRE (which yields lower benefit impacts) a savings factor was adjusted to .29 tons per passenger transported.

A.6. Outline the coordination with other relevant GEF financed initiatives [not mentioned in A.1]:

There are no known GEF-financed projects.

A.7 Describe the institutional arrangement for project implementation: The two main stakeholders involved in the project are MINAE and MOPT.

The MINAE will be the executing agency of this GEF project, while it will coordinate activities closely with MOPT, the transport sector governmental agency that is in charge of the development of the zoning project (baseline for this GEF proposal) and will act as a partner to MINAE in the implementation of the project and has jurisdiction over public transport and work on various main roads in San José. The MINAE will also coordinate with the Municipality of San José in those actions that relate to them – since many roads are jurisdiction of the MOPT, specification of these roles will be done once the pilot projects are implemented. MOPT, however, is not an executive agency of this project but rather the institution in charge of providing support in transport-related activities, while MINAE is specifically the executing agency and in charge of the climate-change related measurements and activities of the GEF.

Coordination mechanisms between MINAE and MOPT are already in place, with the appointment of a liaison between the two ministries and regular meetings and the development of a common framework to improve transport conditions while reducing GHG emissions from the transport sector. This ongoing coordination will serve as a basis for the GEF project as well.

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAs, NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, etc.

According to Costa Rica's 2nd Communication to the UNFCCC⁸, the country, with support from GEF has identified priority sectors to contribute to its sustainable development. Development. Climate change has been identified as a key area and the country has developed a National Strategy on Climate Change (ENCC) with the ambitious goal of becoming climate neutral by 2021. To achieve this, the government has established priority sectors, with transport as their second most important sector to become carbon neutral through the improvement of fuels, vehicle technologies and managing transport infrastructure in the most efficient way. Their National Development Plan (2011-2014) has a main axis of environment and urban planning, where transport appears as one of the two specific areas of action to mitigate climate change (the other one being reducing deforestation). Further, they have developed a detailed Action Plan as of April 2012 which has established specific guidelines and actions to be taken in every sector, including transport with a main role. The 2nd communication to the UNFCCC specifically identifies policies to be implemented in Costa Rica's transport sector that would result in GHG emission reduction. These are the modal shift from private, more polluting modes of transport to, more efficient, less energy intensive and high quality public transport.

Multiple government and academic agencies (Environment, Energy and Telecommunications Ministry, Public Works and Transport Ministry, Health Ministry, San Jose Municipality and National University) in Costa Rica have collaborated to develop an Air Quality Improvement Program for the Great Metropolitan Area (GAM) in 2008. One of the main components of this Program is Clean Fuels and Vehicles. In this framework, the

⁸ <u>http://unfccc.int/resource/docs/natc/cornc2.pdf</u>

first national major primary air pollutants emissions inventory for the GAM was developed, as well as a protocol for the calculation of major primary air pollutants emissions for mobile sources that could be a good start point for the baseline studies required for this project.

In this framework, Costa Rica's Ministry of Environment and Energy (Ministerio de Ambiente y Energía, MINAE) is starting to work with different sector ministries, including the Ministry of Public Works and Transport (MOPT), to design the climate change framework for each sector. The process and the framework are being prepared in the beginning of 2012 and this GEF project will be developed within this framework.

This project is within a very relevant sector at the national level since it is prominently mentioned in the National Strategy of Climate Change, and is aligned to Costa Rica's 2nd communication to the UNFCCC. It also has an important relationship with other initiatives that are financed with international cooperation and is an area of work that is part of the National Development Plan.

Furthermore, this project is also aligned with Costa Rica's Technology Needs Assessment for Climate Change Report⁹ published in 2011. In the report, the Government of Costa Rica identified Urban Transport as a priority for the battle on climate change. More specifically, the report identifies technological, poly and regulatory needs for the improvement of urban transport services in order to reduce pollution and GHG that contribute to climate change.

As mentioned above, MINAE is currently starting to work with different sector ministries to design the climate change framework for each sector, to achieve the ambitious goal of becoming carbon neutral by 2021. Costa Rica is one of the only countries in the world to pledge to go carbon neutral. To achieve this, Costa Rica must actively engage the transport sector, as transport accounts for the majority of green-house gas emissions in the country. This has been specified in the National Climate Change Strategy, the National Development Plan and the most recent Action Plan for the Climate Change National Strategy.

In coherence with these measures, the MOPT has appointed staff to liaise with MINAE to articulate and execute a strategy of reducing GHG emissions from transport. The MOPT, in coordination with the MINAE, has provided useful inputs for the preparation of this document.

B.2. GEF focal area and/or fund(s) strategies, eligibility criteria and priorities

The proposed Program is aligned with the GEF strategic program "CCM-4: Transport/ Urban: Promote energy efficient, low-carbon transport and urban systems, by incorporating GHG emissions considerations in mobility strategies and plans of San Jose, Costa Rica. This will be applied to the entire city as the project components relate to the improvement of the transport system in the city as a whole.

The proposed program is strongly aligned with focal area objective CCM-4, as it focuses on activities that have a transformative impact in helping the GEF-recipient country move towards a low-carbon development path, through a concerted effort to improve land use management, transport planning, and public transit. It also aims to integrate non-motorized transport with

⁹ <u>http://unfccc.int/ttclear/sunsetcms/storage/contents/stored-file-20130404174436439/Tecnologicas%20CC-Mitigacion-2.pdf</u>

transit, while also reducing the demand of private transport use. Options for intervention during GEF-5 include land use and transport planning, public transit systems, energy efficiency improvements of the fleet, efficient traffic control and management, transport demand management, and non-motorized transport. All of these measures will be considered and promoted in this project, though the effects of some (i.e. land use planning, energy efficiency improvements in the entire fleet) will develop fully until after the finalization of the 30 months of this project.

Public awareness and participation will be an integral part of a successful program; workshops will include citizens, users of different transport modes, private sector (public transport operators, land developers and parking managers) and public sector from the local and national governments.

The GEF-5 strategy states that strong commitments from the local as well as the national governments are particularly important. The GEF-5 strategy includes the provision of technical assistance in transport and urban planning (as is specified in all components of the proposed program), in the development of innovative financing mechanisms (as has been specifically included in the TDM component of the proposed program), in the deployment of awareness campaigns, and investments in demonstration and deployment of high-performance technologies (such as improved public transport, integration facilities and TDM technologies). During GEF-5, greater attention is being given to measuring and quantifying global environmental benefits, which will provide the basis for choosing the best set of interventions to deliver maximum global and local benefits; the last component (baseline studies and GHG emissions estimates) addresses this need directly. All priorities for GEF-5 will be observed in the proposed program.

B.3 The GEF Agency's program (reflected in documents such as UNDAF, CAS, etc.) and Agencies comparative advantage for implementing this project:

The Inter-American Development Bank is well positioned to implement this project. The IDB has financed sustainable transport projects across the region, including Bus Rapid Transit systems in a variety of countries (Brazil, Colombia, Chile, Peru, Guatemala, Mexico are some examples.) With years of experience in implementing sustainable transport projects, the IDB is an important technical partner in this project and can provide lessons learned in all areas of sustainable urban transport: financing, implementation, political considerations, institutional capacity, social issues, and more. In addition, the IDB has two key specialists located in the IDB country office in San Jose: one transport specialist, and one GEF focal point that work closely with the Government of Costa Rica to ensure that GEF projects implemented by the IDB follow the country's priorities.

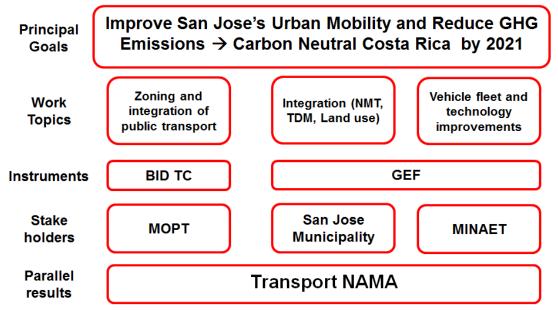


Figure 4. Framework agreed-upon with government as IDB's support to sustainable urban transport in San Jose

The Sustainable Urban Mobility Program for San Jose Costa Rica (see diagram above) fits very well with the IDB work program. The Bank's 9th Capital Increase stressed the importance of climate change and its consequences in the region, and called for the IDB to step up its effort in this area, requiring that 25 % of all IDB operations must have Climate Change components. Over the last three years, the Transport Division of the IDB has moved consciously towards more projects in this area and launched an Action Plan (the Regionally Environmentally Sustainable Transport Action Plan) which outlines the work of the division in lending operations, technical cooperation projects, internal and external capacity building, and knowledge management.

As mentioned above, the IDB has two key specialists located in the IDB country office in San Jose: one transport specialist, and one GEF focal point. These two, along with the project team at IDB headquarters, can provide the technical knowledge necessary to successfully implement the project.

The ministry of environment has expressed interest to the IDB in the formulation of a transport Nationally Appropriate Mitigation Action (NAMA) as a parallel process to the different activities, projects and investments that will be conceived with IDB technical cooperation investment ("zoning project") leveraging GEF and other cofinancing institutions' contributions. The transport NAMA's focus is to support the reduction of GHGs in support for the achievement of the carbon neutral goal in 2021. A description of the conceptual framework of is illustrated in Figure 4 above.

C. DESCRIBE THE BUDGETED M & E PLAN:

This project will have a monitor and evaluation (M&E) plan as part of its overall implementation process, based on the structure, outputs and indicators proposed in the

logical framework and according to GEF procedures (see Annex A). It will include both team members and external review teams in certain occasions. The evaluation of the project will be based on performance in execution, delivery of outputs and project impact regarding reductions in GHG emissions, and other co-benefits such as reduction in VKT and increase use of public transport, among others.

The M&E plan procedure will consist of detailed progress reports, and a final project report. The M&E plan will also have a continuous monitoring with specific milestones every six months. Reporting on project progress and indicator achievement will also be developed on a semester basis. The final reports will be submitted to the GEF M&E Unit as well as other stakeholders involved in the implementation of this project.

The project manager within IADB Transport Division (INE/TSP) will be responsible for the continuous monitoring of project activities, the implementation of the different components with their respective studies and project progress. The sustainable transport strategic area within INE/TSP will be responsible for tracking the overall project milestones and the GEF project outputs.

From GEF grant, US\$50,000 will be used towards covering M&E activities, while an additional US\$30,000 from co-financing will be destined for this purpose.

Type of M&E activity	Category	GEF Budget (USD)	Co- financing (USD)	Responsible parties	Time frame
Measurement GEF tracking tool indicators	Project management	10,000	15,000	Project manager	Continuous
Project implementation review	Project management			Project manager, MINAE	Every six months (total of 3 reviews)
Monitoring project indicators	Project management			Project manager	End of project
Semester monitoring reports	Project management	5,000	15,000	Project manager, MINAE	Every six months (total of 3 reports)
Independent final evaluation report	Terminal Evaluation Review conducted by INE/TSP	15,000	20,000	External reviewer	2 months prior to project finalization

Details of M&E activities are provided in the Table below.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the <u>Operational Focal Point endorsement letter(s)</u> with this template. For SGP, use this <u>OFP endorsement letter</u>).

NAME	NAME POSITION		DATE (<i>MM/dd/yyyy</i>)
Ruben Muñoz Robles	GEF operational focal	COSTA RICA	4/18/2014
	point in Costa Rica	MINSITRY OF	
		ENVIRONMENT	
		AND ENERGY	
		(MINAE)	

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.

Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Projec t Contact Person	Telephon e	Email Address
Michael		06/12/2014	Ramiro	+1202-623-	rarios@iadb.org
Collins, IDB-	11 / 11		Alberto	2399	
GEF	11 CM		Ríos,		
Executive			Transport		
Coordinator			Division		
			(INE/TSP)		

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

	Intervention logic	Objectively verifiable indicators of achievement	Project Targets	Sources and means of verification
Overall objective	Promote and integrate non- motorized transport and sustainable public transport as a multimodal system which reduces the demand of private motorized travel and greenhouse gas emissions in the city of San Jose	Length of bikeways built 1 bus mass rapid transit corridor	20 km of bikeways	Reports
Specific objectives	 1) Integrate public transport in 2) Develop a Travel Demand N 3) Develop of transportation an 4) Improve vehicle fleet in the 5) Baseline studies and estimate 			
Expected outcomes	RESULT 1: Increased coverage of public transport system by means of greater access from various modes, as well as reduced travel by private motorized vehicles with a direct consequence of reduced GHG emissions due to mode shift towards public and non- motorized transport integration is seen in San Jose	 Public transport coverage Non-motorized travel mode share increase Mode shift from private vehicles 	 30% increases in public transport use 40% increase in NMT mode share 20% mode shift from private vehicles to more sustainable transport modes 	 (initial) Origin-destination survey Public transport demand studies (later)

	Intervention logic Objectively verifiable indicators of achievement Project Targets				
vehicle private use of direct of GHG e improv mecha in San	ESULT 2: Reduction of e kilometers traveled in e automobiles and greater public transport, with a consequence of reduced emissions and vement of financial nisms for urban transport Jose through innovative financing mechanisms.	 Reduction in motorized private vehicle Modal shift 	 10% reduction in VKT 20% mode shift from private to public and NMT 	- (initial) Origin-destination survey	
unders reducti mode o transit use pla exister Jose (F Territo reducti throug sustain includi of priv of pub	ESULT 3: Detailed tanding of potential ion of length and change of of trips in San Jose, due to oriented and mixed land unning integrated to the at POT document for San Plan de Ordenamiento orial) and eventual ions of GHG emissions h a shift towards more hable modes of transport, ing a reduction in the use ate cars and increased use lic transport and non- zed transport	 transit oriented development studies and policies analyzed Reduction of trip lengths 	 1 study 1 study and policy analysis for Transport Oriented Development on average trip lengths and GHG for San Jose 	Reports and evaluation of potential mode shift, kilometers traveled and GHG emissions reduction.	
San Jo conditi emissio	ESULT 4: Vehicle fleet of se has improved its ions, reducing the ons in the transport sector	Vehicle technology improvement	1% of cuasi-rentas vehicle fleet has improved technological conditions (better engine technology)	National and local fleet registration records	
trackin GHG e Jose T GAM, emissie scenari a MRV	ESULT 5: Detailed ag of current and future emissions from the San ransport Sector within the Forecasting of future ons according to different ios and Implementation of <i>I</i> system for the project and city with the goal of	MRV system developed	1 report on MRV system for the project	Reports of MRV system	

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Intervention logic	Objectively verifiable indicators of achievement	Project Targets	Sources and means of verification
producing a NAMA			

ANNEX B: LETTERS OF COMMITMENT MINAE (Focal Point) See attached